

IN THE CLAIMS:

Please amend claims 1-9 and add new claims 10-13 as follows:

1. (Currently Amended) A method of transmitting data in a packet radio network to a mobile station (~~MS~~) ~~performing a~~ when the mobile station's routing area is being updated, the network comprising at least a first support node (~~SGSN₁~~) and a second support node (~~SGSN₂~~);

in which method

the packet radio network sends data (~~2-0, 2-3a~~) to the mobile station (~~MS~~) via the first support node (~~SGSN₁~~);

the mobile station (~~MS~~) sends a routing area update message (~~2-1~~) to the second support node (~~SGSN₂~~), which sends to the first support node (~~SGSN₁~~) a request (~~2-2~~) for the context data (~~2-5~~) of the mobile station from the first support node;

the first support node sends (~~2-3e, 3-3e, 4-3e~~) from its memory data addressed to a mobile station to the second support node;

~~characterized in that~~

a condition is defined, upon ~~the~~ fulfillment of which it is at least probable that the second support node (~~SGSN₂~~) has at its disposal the context data of the mobile station; and

when the routing area is being updated, at least one support node (~~SGSN_{1,5}~~ ~~SGSN₂~~) delays data transmission until said condition is fulfilled.

2. (Currently Amended) A method as claimed in claim 1, ~~characterized in~~ that wherein the first support node (SGSN_1) waits for a predetermined period of time (~~3-3b, 4-3b~~) before sending data to the second support node (SGSN_2).

3. (Currently Amended) A method as claimed in claim 2, ~~characterized in~~ that wherein said predetermined period of time (~~3-3b~~) is fixed at least for ~~each~~ at least one quality of service.

4. (Currently Amended) A method as claimed in claim 3, ~~characterized in~~ that wherein the predetermined period of time (~~3-3b~~) depends on the quality of service of the a connection used by the mobile station (MS).

5. (Currently Amended) A method as claimed in claim 3, ~~characterized in~~ that wherein said fixed period of time is determined by the second support node (SGSN_2) notifying to the first support node (SGSN_1) the time which substantially corresponds to ~~the a~~ time setting of ~~the a~~ retransmission timer of the second support node and by one of the support nodes adding a small security margin to this time.

6. (Currently Amended) A method as claimed in claim 1, ~~characterized in~~ that wherein, before data transmission to the second support node (SGSN_2), the first support node (SGSN_1) waits for a separate acknowledgement message (~~4-4'~~) from the second support node, the separate acknowledgement message indicating that the second support node has received the context data (~~2-4~~) of the mobile station.

7. (Currently Amended) A method as claimed in claim 6, ~~characterized in~~ that wherein the first support node (SGSN_1) waits for said acknowledgement message (~~4-~~

4') for a predetermined maximum period of time and resends the context data if it does not receive the acknowledgement message within this time.

8. (Currently Amended) A method as claimed in claim 1, ~~characterized in that~~ wherein:

the second support node (~~SGSN₂~~), which receives data packets for which the second support node does not have associated ~~with any PDP-context data~~, checks whether a routing area update between support nodes is in progress; and

if a routing area update between support nodes is in progress, the second support node (~~SGSN₂~~) stores the data packets in memory until the routing area update has been terminated, and then sends the packets to ~~the receiver~~ a recipient.

9. (Currently Amended) A support node (~~SGSN₁-SGSN₂~~) in a packet radio network, the support node being arranged to support data transmission in a packet radio network to a mobile station (~~MS~~) performing a routing area update; ~~characterized in that~~ wherein during a routing area update the support node (~~SGSN₁-SGSN₂~~) is arranged to

observed ~~the~~ fulfillment of a condition indicating that ~~the~~ a second support node (~~SGSN₂~~) is at least likely to have at its disposal ~~the~~ context data of the mobile station; and

delay data transmission until said condition is fulfilled.

10. (New) A method of transmitting data in a packet radio network to a mobile station when the mobile station's routing area is being updated, the network comprising at least a first support node and a second support node;

in which method

the packet radio network sends data to the mobile station via the first support node;

the mobile station sends a routing area update message to the second support node, which sends to the first support node a request for context data of the mobile station from the first support node;

the first support node sends from its memory data addressed to a mobile station to the second support node;

when the routing area is being updated, at least one support node delays data transmission until the second support node has at its disposal the context data of the mobile station.

11. (New) A support node in a packet radio network, the support node being arranged to support data transmission in a packet radio network to a mobile station performing a routing area update; ~~characterized in that~~ wherein during a routing area update the support node is arranged to delay data transmission until a second support node has at its disposal context data of the mobile station.

12. (New) A method of transmitting data in a packet radio network to a mobile station when the mobile station's routing area is being updated, the network comprising at least a first support node and a second support node;

in which method

the packet radio network sends data to the mobile station via the first support node;

the mobile station sends a routing area update message to the second support node, which sends to the first support node a request for context data of the mobile station from the first support node;

the first support node sends from its memory data addressed to a mobile station to the second support node;

a condition is defined, upon fulfillment of which it is at least probable that the second support node has at its disposal the context data of the mobile station; and

when the routing area is being updated, at least one support node delays data transmission until the second support node has at its disposal the context data of the mobile station.

13. (New) A support node in a packet radio network, the support node being arranged to support data transmission in a packet radio network to a mobile station performing a routing area update; ~~characterized in that~~ wherein during a routing area update the support node is arranged to delay data transmission until a second support node has at its disposal context data of the mobile station.